

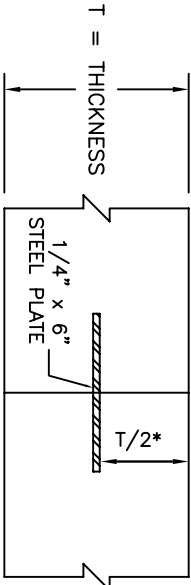
JOINT TYPES AND THEIR DESCRIPTION

CONTROL - (CONTRACTION) - CONTRACTION JOINTS ARE USED TO CONTROL THE LOCATION OF CRACKS CAUSED BY DRYING, SHRINKAGE AND THERMAL CHANGES. THESE JOINTS MAY BE FORMED BY PARTIALLY REDUCING THE CROSS SECTION OF CONCRETE BY SAWING, USING HAND GROOVERS, OR USING REMOVABLE STRIPS OF WOOD, METAL, OR PREFORMED JOINT MATERIAL.

ISOLATION - (EXPANSION) - DESIGNED TO PREVENT CRUSHING AND DISTORTION OF ABUTTING CONCRETE UNITS FROM COMPRESSIVE FORCES DEVELOPED FROM EXPANSION. THIS JOINT IS USED TO ISOLATE STRUCTURAL UNITS THAT EXHIBIT DIFFERENTIAL MOVEMENT.

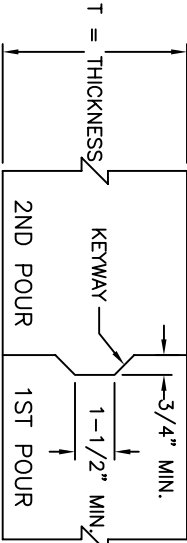
CONSTRUCTION - THIS TYPE JOINT IS USED WHERE A FRESH POUR OF CONCRETE ABUTS AN EXISTING ONE. THIS TYPE OF JOINT IS NORMALLY USED WHEN BONDING OF THE TWO POURS IS PROPOSED. PLACEMENT OF THESE JOINTS IS USUALLY IN A PREDETERMINED LOCATION. THE CONSTRUCTION JOINTS MAY ALSO FUNCTION AS AN EXPANSION OR A CONTRACTION JOINT WHEN MODIFIED.

<u>TYPES OF CONCRETE JOINTS</u>	<u>DRAWING NO.</u>
Liquid Tight Slab Joints	PA-004B
Non-Liquid Tight Slab Joints	PA-004C
Liquid Tight Wall Joints	PA-004D
Non-Liquid Tight Wall Joints	PA-004E



* SHIFT PLATE TO LIQUID SIDE WHERE REINFORCING STEEL IS AT CENTER.

STEEL PLATE ALTERNATE FOR CONSTRUCTION JOINTS THAT ARE NOT CONTROL OR ISOLATION JOINTS

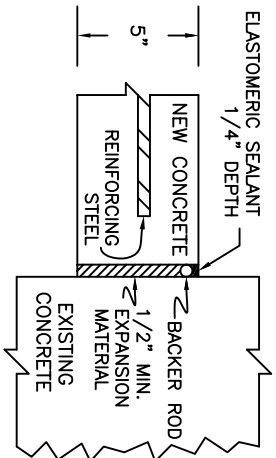


KEYWAY ALTERNATE FOR ALL CONSTRUCTION JOINTS

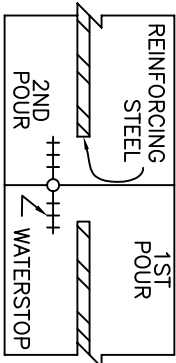
NOTES FOR DRAWINGS PA 004B - 004E:

1. Reinforcing steel may be bars or wire fabric.
2. Sections are shown with single grid of reinforcing steel; same joint details apply for multiple grid.
3. Drawings are adapted from WI - 560/564.
4. Most common purpose of labeled joints is underlined.

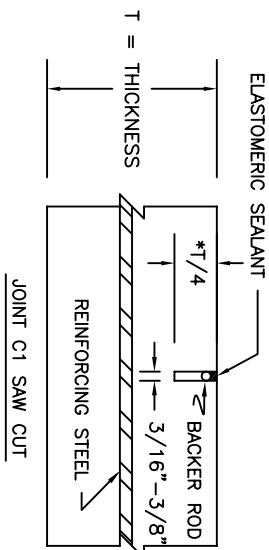
JOINT A



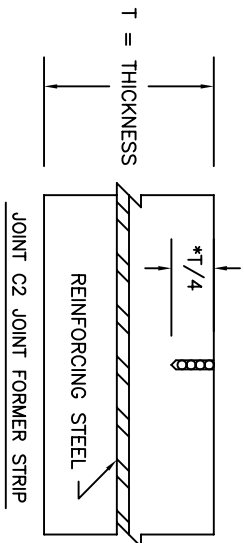
JOINT B



JOINT C1



JOINT C2



REVISED 6/02
REDRAWN: TJA 7/05

Designed A. WOOD
Drawn S. DUNN
Checked _____
Approved by _____

Date 11/90
11/90

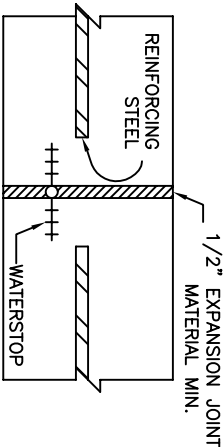
ISOLATION
CONSTRUCTION
CONTROL

CONSTRUCTION
CONTROL

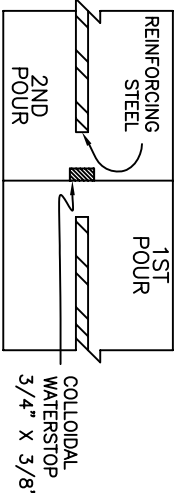
- NOTES:
1. BACKER ROD SHALL BE A LARGER WIDTH THAN THE WIDTH OF THE SAW CUT.
 2. SEALANT DEPTH SHALL BE 1/4" OR SLIGHTLY LESS THAN JOINT WIDTH, WHICHEVER IS LESS.
 3. CUT 50% OF THE REINFORCING STEEL DIRECTLY UNDER THE JOINT.

- NOTES:
1. REMOVE JOINT FORMER STRIP AND TREAT AS INDICATED FOR JOINT C1.
 2. SEALANT DEPTH SHALL BE 1/4" OR SLIGHTLY LESS THAN JOINT WIDTH WHICHEVER IS LESS.
 3. CUT 50% OF THE REINFORCING STEEL DIRECTLY UNDER THE JOINT.

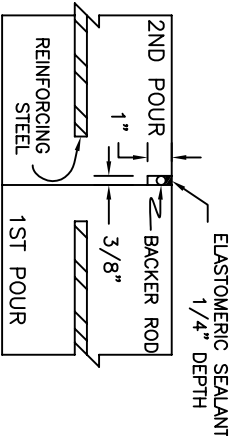
JOINT D



JOINT E



JOINT F



NOTE: BACKER ROD TO BE 1/8" LARGER THAN WIDTH OF JOINT

ISOLATION
CONTROL
CONSTRUCTION

CONSTRUCTION
CONTROL

CONSTRUCTION
CONTROL

* T/4 NEED NOT BE GREATER THAN 2" FOR SLABS THICKER THAN 8".

LIQUID TIGHT SLAB JOINTS

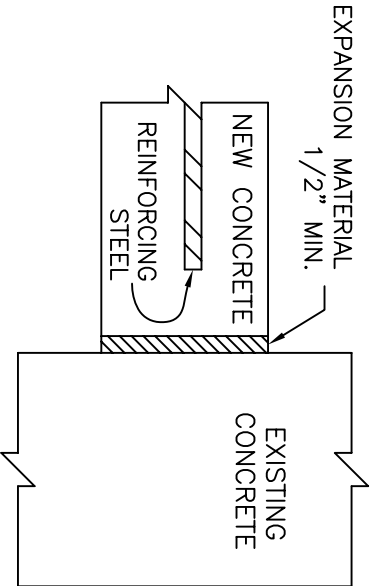
CROSS SECTIONS



COUNTY, PENNSYLVANIA

CONCRETE JOINTS

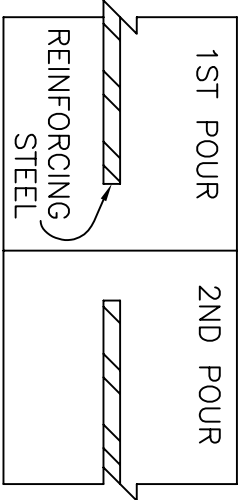
JOINT G



MAY BE USED AGAINST EXISTING STRUCTURE

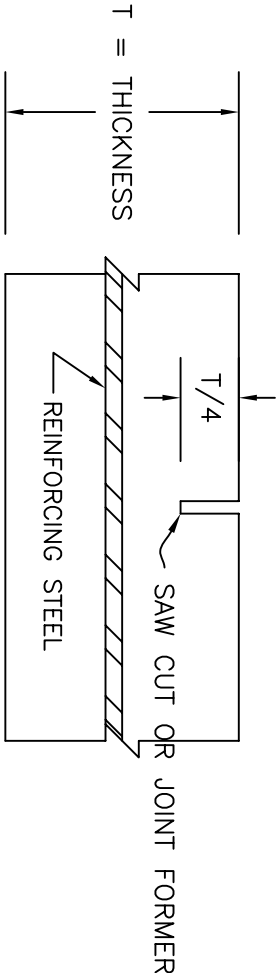
ISOLATION
CONTROL
CONSTRUCTION

JOINT H



CONSTRUCTION
CONTROL

JOINT I



CONTROL

- NOTES: 1. CUT 50% OF THE REINFORCING STEEL
DIRECTLY UNDER THE JOINT.
2. T/4 NEED NOT BE GREATER THAN 2"
FOR SLABS THICKER THAN 8".

REVISED 6/02
REDRAWN: TJA 7/05

Designed A. WOOD Date 11/90
Drawn S. DUNN 11/90
Checked _____
Approved by _____

_____ COUNTY, PENNSYLVANIA
CONCRETE JOINTS



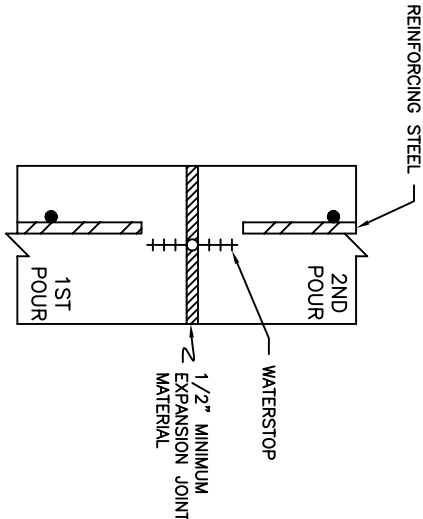
File No.
PA-004C.dwg

Drawing No.

PA-004C

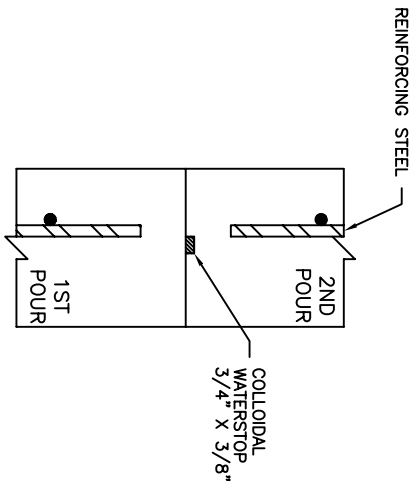
Sheet _____ of _____

JOINT L



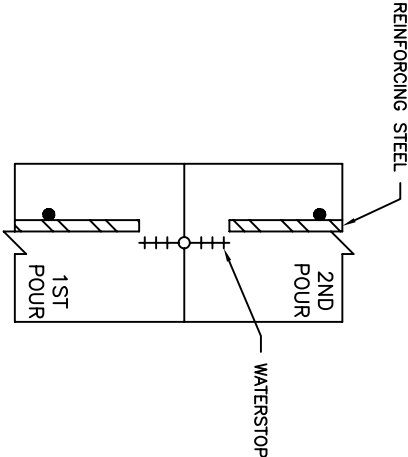
ISOLATION
CONSTRUCTION
CONTROL

JOINT M



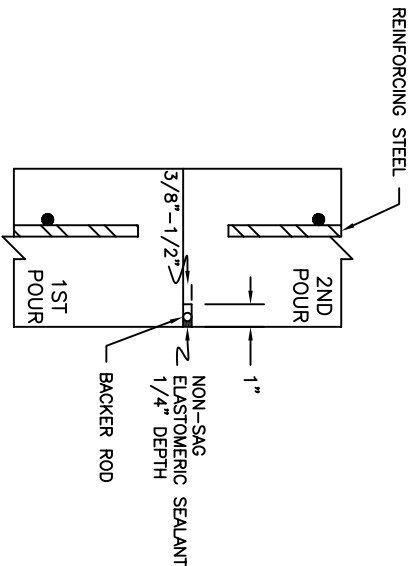
CONSTRUCTION
CONTROL

JOINT N



CONTROL
CONSTRUCTION

JOINT O



CONTROL
CONSTRUCTION

- NOTES:
1. BACKER ROD TO BE 1/8" LARGER THAN WIDTH OF THE JOINT.
 2. NOTCH FOR SEALANT TO BE FORMED IN THE CONCRETE EITHER 1ST OR 2ND POUR.

LIQUID TIGHT WALL JOINTS

PLAN VIEW

REDRAWN: TJA 7/05

Designed	<u>A. WOOD</u>	Date	<u>11/90</u>
Drawn	<u>S. DUNN</u>		<u>11/90</u>
Checked			
Approved by			

_____ COUNTY, PENNSYLVANIA

CONCRETE JOINTS

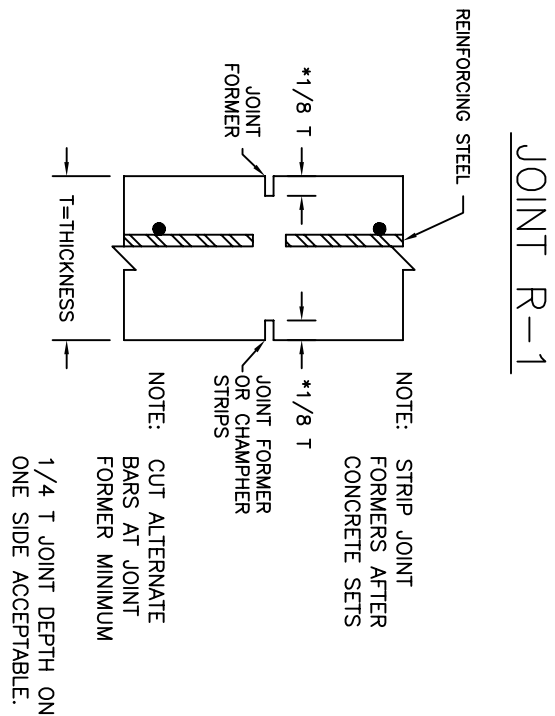
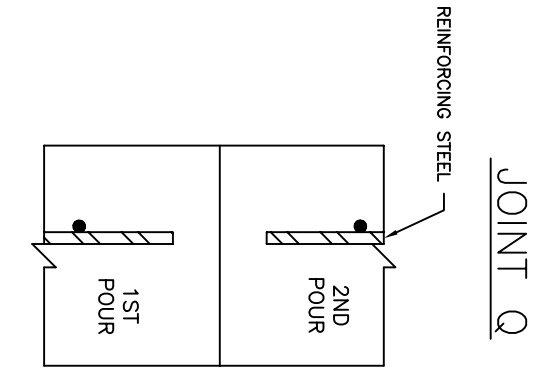
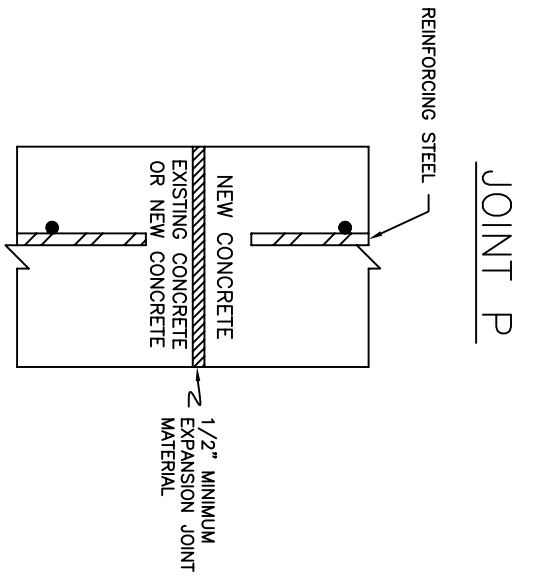


File No.
PA-0040.dwg

Drawing No.

PA-004D

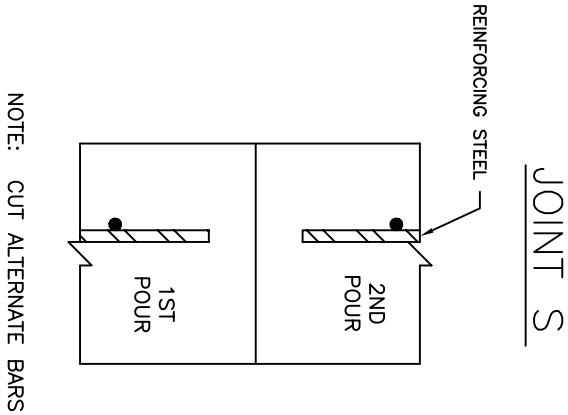
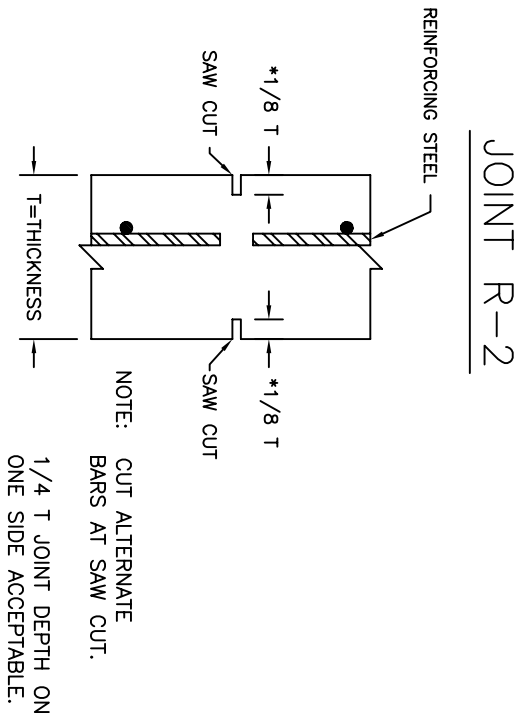
Sheet# _____ of _____



ISOLATION
CONSTRUCTION
CONTROL

CONSTRUCTION
CONTROL

CONTROL



CONTROL

CONTROL

NON-LIQUID TIGHT WALL JOINTS

PLAN VIEW

* T/8 NEED NOT BE GREATER THAN 1" FOR
SLABS THICKER THAN 8".

REDRAWN: TJA 7/05

Designed	<u>A. WOOD</u>	Date	<u>11/90</u>
Drawn	<u>S. DUNN</u>		<u>11/90</u>
Checked	_____		_____
Approved by	_____		_____

_____ COUNTY, PENNSYLVANIA
CONCRETE JOINTS



File No.
PA-004R.dwg

Drawing No.

PA-004R

Sheet: _____ of _____